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Recursive functions with implicit termination: a new approach illustrated by software-engineering examples

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Abstract

The author describes how the extended non-first-normal-form (ENFNF) data model in combination with a recursion mechanism based on functions with implicit termination is a promising vehicle for the database part of software engineering systems. Functions have been used primarily as a tool for implementing recursive queries. It is shown how dependencies between software objects can be modeled by objects of the ENFNF data model in a convenient and natural way. Moreover, arbitrary dependencies can be queried by functionally recursive queries in a natural way. Nevertheless, the method is not limited to software engineering systems. Implementation techniques are presented

Index Terms

Inspec

Controlled Indexing

[relational databases](#) [software engineering](#)

Non-controlled Indexing

[arbitrary dependencies](#) [database](#) [dependencies](#) [extended nonfirst normal form data model](#)
[implicit termination](#) [recursive functions](#) [recursive queries](#) [software objects](#) [software-engineering](#)

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References

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Citing Documents

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